

Three Mountain Power, LLC 3085 Crossroads Drive Redding, CA 96003 Tel (530) 224-3300 Fax (530) 224-3310

October 22, 2003

Ms. Connie Bruins Compliance Manager California Energy Commission 1516 Ninth St. (MS-2000) Sacramento, CA 95814

Re: Three Mountain Power, LLC, Petition for Post Certification Amendment (NOx ppm reduction) – Docket No. 99-AFC-2

Dear Ms. Bruins:

As a result of delays on the Three Mountain Power project due to reasons beyond our control, and newly established BACT limits for NOx, TMP is requesting post certification amendments to air quality provisions AQ-20, AQ-38, AQ-41, and AQ-42. In conjunction with this effort, TMP has requested on September 26, 2003, that EPA modify and extend the Authority to Construct (ATC/PSD) Permit # 99-PO-01, (The ATC Permit) issued by the Shasta Co. AQMD on February 20, 2001.

Recently EPA established authority to review and issue PSD permits. Therefore, we have simultaneously filed, with EPA, and the Shasta Co. AQMD, a request for extension (Item 1 below), and minor permit modification (Item 2 below) of the existing permit.

1. Request for Extension of ATC/PSD Permit #99-PO-01 (Request forwarded to EPA Region IX and Shasta Co. AQMD Sept. 26, 2003)

Three Mountain Power's ATC Permit is currently set to expire on Dec. 31, 2003. Under the District Regulation 2:12, and 40 CFR Part 52.21 (r)(2), the permit may be extended upon satisfactory showing that an extension is justified. For that reason, we have requested an 18 month extension of the ATC Permit to a new expiration date of June 30, 2005. We believe that there is no impact on emissions as a result of extending the ATC/PSD Permit.

The Three Mountain Power project has been delayed due to various factors beyond our control. Our efforts over the past several years to secure financial partners for Three Mountain Power have been unsuccessful. This is due to a variety of factors including delays in the siting process, the effect of the Enron bankruptcy on the industry in general, the current state of the economy, and ongoing legislative and regulatory uncertainties in California. In addition, lower power pricing has significantly reduced the

number of companies interested in purchasing power, creating an unfavorable environment for negotiating power "off take" arrangements that allow the project to be economic.

We are hopeful that some of the uncertainties with the economy and the energy market will become clearer with time. In the meantime, we will be in regular contact with you to ensure that we provide as much information as possible to you to aid in your planning.

As you know from previous communications, Covanta Energy filed a voluntary petition for bankruptcy on April 1, 2002 under Chapter 11 of the U.S. Bankruptcy Code. Subsequently, on September 8, 2003 we filed our draft Plan of Reorganization which is subject to approval by creditors and the Court. This is a key step toward achieving our goal of emerging from Chapter 11 by year-end. While we do not yet know the full impact of this reorganization on our future construction activities, Covanta Energy continues to maintain this development asset and may choose to enter into partnership or sale agreements in the future. For this reason, Three Mountain Power's voluntary wood stove replacement program was continued until its successful completion on May 14, 2003 (based on the program requirements for the use of Westinghouse turbines). As of that date, 454 older wood stoves in the Burney area have been replaced with less polluting and more environmentally friendly heating devices. These replacements have now achieved and actually surpassed the program requirements for the use of Westinghouse turbines (399 replacements were required). Thus the wood stove replacement program is now concluded until Three Mountain Power makes a final determination on the type of turbines that will be used.

Three Mountain Power has worked diligently since certification to seek partners and to properly maintain all project compliance requirements. Again, for the reasons stated above, we have requested an 18 month extension of the ATC Permit to a new expiration date of June 30, 2005.

2. Request for Post Certification Amendments of the Decision and Minor Modification of ATC/PSD Permit #99-PO-01 (NOx Limits)

We request modification of the existing permit language as shown below. The language in the Shasta County AQMD ATC/PSD Permit is identical to the language included in the California Energy Commission Decision 99-AFC-2 issued May 16, 2001. The exact language of the existing ATC/PSD permit and air quality conditions of certification contained in the Commission Decision are used and requested insertions are indicated by bold and underlined text, and deletions are shown by a strikethrough. The existing ATC/PSD Permit issued by Shasta Co. AQMD is attached (See Attachment 1).

Information is submitted herein to address the informational requirements of CCR Title 20 Section 1769 regarding necessity of modifications to the Decision.

- (A) A complete description of the proposed modifications, including new language for any conditions that will be affected. See below beginning with AQ-38.
- (B) A discussion of the necessity for the proposed modifications;
 Three Mountain Power is permitted at 2.5 ppmvd @ 15% O2, 1-Hr rolling average. We have discussed BACT issues with the Shasta Co. AQMD, EPA.

and the California Air Resources Board. The only issue of concern noted by AQMD and EPA with our current permit was the NOx ppm limit. A BACT review was previously conducted for the Blythe Energy Project (BEP) by the California Air Resources Board (CARB) and as documented in the attached CARB document (See Attachment 2) found that NOx ppm levels of 2.0 ppm have been achieved on similar units and verified through source testing.

- (C) If the modification is based on information that was known by the petitioner during the certification proceeding, an explanation why the issue was not raised at the time;
 - New lower limits on NOx emissions were not achievable at the time.
- (D) If the modification is based on information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted;

 The change only reflects current technically achievable limits for NOx which are lower than documented in the final decision.
- (E) An analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts;

 Since the newly proposed lower limit of 2.0 ppm NOx is a lower level of emissions there will be a reduction in the amount of NOx produced which will not have any adverse impacts, in fact, will be positive for the environment.
- (F) A discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards; These changes will not affect the facility's ability to comply.
- (G) A discussion of how the modification affects the public;
 There will be no adverse impact on the public, in fact, NOx emissions will be lower as a result of the changes.
- (H) A list of property owners potentially affected by the modification;
 No adverse environmental impacts on property owners will result from these changes.
- (I) A discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings;
 There will be no adverse impact on the public, in fact, NOx emissions will be lower as a result of the changes.

Several combined cycle plants of similar size have been permitted in California with this new limit and one is operating in Massachusetts (ANP Blackstone) in compliance with the new lower 2.0 ppm NOx limit (See ANP Source Test Results Attachment 3). Due to the new lower proposed NOx limit the former "NOx demonstration limit" is no longer required. We request that the demonstration limit provision be removed as indicated below.

We believe that there is a beneficial reduction NOx emissions as a result of reducing the current NOx ppm limit from 2.5 ppm to 2.0 ppm. Consequently the mass emission rates

for both the GE and Westinghouse turbines have changed as well. The emission rates have been recalculated using the ratio of the newly proposed limit to the existing limit and then multiplying the result times the lb/hr, lb/day, and tons/yr limits in the permit. This also affects emission reduction credits (ERCs) by reducing the amount of NOx ERCs required in AQ-20. More than sufficient ERCs for NOx are currently available in the Shasta Co. AQMD ERC Bank, thereby eliminating the need for specific ERCs mentioned in the existing AQ-20 language.

Additionally, the provisions requiring emission reduction credits should also be modified consistent with the annual emissions of NOx estimated for the project. A smaller amount of NOx will be produced under the new lower 2.0 ppm NOx limit in the proposed minor modification request. The annual NOx emissions for the GE Turbine will be 115 Tons/yr and for the Westinghouse Turbine would be 104 Tons/yr. Therefore, we request as stated below that AQ-20 (Section 20 item a. of the ATC/PSD Permit) be modified to reflect these new lower emissions.

Three Mountain Power requests that the following Conditions of Certification and corresponding ATC/PSD Permit Language be modified as follows:

AQ-38 (PSD Permit Condition #35) Emissions from each gas turbine, duct burner, and associated HRSG shall meet all of the emission limitations listed in a. through g. below for each power train at any firing rate and ambient conditions (except as noted in Condition AQ-39 (PSD Permit Condition #36):

Pollutant	GE	Westinghouse	Either CTG Manufacturer	Verification
a. NOx as NO ₂	18.9 15.1 ² pounds per hour	16.8 13.4 ² pounds per hour	2.5 2.0 ppmvd ² , 1-hr rolling averaging @ $15\% O_2$	Verified by CEMS and annual compliance test at maximum operating capacity of the turbines ¹

Notes: ¹After the first *five* annual compliance tests and upon written request to the APCO with adequate justification (consistent demonstration of compliance), the owner/operator may, if allowed by the APCO, use CEM data to verify compliance with the NO_x and CO emissions specified above. The owner/operator may also reduce the frequency of testing for VOC and SOx emissions from the HRSG exhaust and the PM₁₀ emission testing of the cooling tower after the first *five* annual compliance test if consistent demonstration of compliance has occurred and if allowed by the APCO in accordance with District Rule 2:11a.3.(f).

² The owner/operator shall install a SCR system that is designed to meet a NOx emission limit of no more than 2.0 ppm, based on a 1-hour rolling average (Demonstration NOx Limit), and guaranteed by the SCR vendor to meet the Demonstration NOx Limit, to the extent that the SCR vendor will provide such a guarantee to the owner/operator. The owner/operator shall install, operate, and maintain the SCR system in a manner designed to achieve the Demonstration NOx Limit, and in conformance with the SCR vendor's installation, operation, and maintenance procedures. For a period of three years commencing with

commercial operations, the owner/operator will conduct a demonstration program with District and the CEC CPM oversight to determine whether the owner/operator is able to reliably and continuously operate while maintaining the Demonstration NOx Limit. (The District shall consider allowable excess emissions in accordance with District Rule 3:10 when evaluating the facility's performance with respect to the Demonstration NOx Limit. In addition, the District will consider whether the Demonstration NOx Limit has been achieved on a consistent basis within the allowances under District Rule 3:10 with suitable compliance margin of at least 10% over the entire range of turbine operating conditions, including duct firing, and over the entire range of ambient conditions). Upon conclusion of this three-year demonstration program, if the District determines that the owner/operator can reliably and continuously operate while maintaining the Demonstration NOx Limit, the owner/operator shall accept the Demonstration NOx Limit and correspondingly adjusted hourly mass emission limitations in the facility's Permit to Operate. Should the District and the CEC CPM determine that the owner/operator cannot reliably and continuously operate while maintaining the Demonstration NOx Limit, the NOx emission limit in the facility's Permit to Operate shall remain unchanged.

[PSD]

AQ-41 (PSD Permit Condition #38) The facility total emissions from each gas turbine/HRSG power trains and cooling tower including periods of all equipment startups, shutdowns, and operational modes shall not exceed the following limits during any calendar day:

	GE	Westinghouse	Cooling Tower
NOx as NO ₂	679 <u>543</u> pounds per day	638 <u>510</u> pounds per day	

[PSD]

AQ-42 (PSD Permit Condition #39) The facility total emissions from both gas turbine/HRSG power trains, and the cooling tower, including periods of all equipment startups, shutdowns, initial commissioning and operational modes, shall not exceed the following ton per year limits during any consecutive twelve-month period:

	GE (2CTGs)	Westinghouse (2CTGs)	Cooling Tower
NOx as NO ₂	144 <u>115</u> tons per year	130 104 tons per year	

[PSD]

AQ-20 (PSD Permit Condition 20. a.) If General Electric PG7241FA gas turbines are utilized for the project, the total NOx Emission Reduction Credits (ERC) purchased for the project shall be <a href="https://doi.org/10.1001/j.com

If Westinghouse 501F gas turbines are utilized for the project, the total NOx Emission Reduction Credits (ERC) purchased for the project shall be 104 130 tons/year (51,293 64,116 pounds in Calendar Quarter I, 51,854 64,818 pounds in Calendar Quarter II, 52,472 65,534 pounds in Calendar Quarter III, and 52,472 65,534 pounds in Calendar Quarter IV). The total VOC ERCs purchased for the project shall be 65 tons/year (32,058 pounds in Calendar Quarter I, 32,409 pounds in Calendar Quarter II, 32,656 pounds in Calendar Quarter III, and 32,656 pounds in Calendar Quarter IV). The ERCs shall be purchased from sources available from the Shasta Co. AQMD Emission Reduction Credit Bank. Sierra Pacific Industries, Inc. available on Certificate No. 97-ERC-02 previously entered in the District ERC bank.

Again, we are hereby requesting amendments of the Commission Decision as stated above. Thank you for your consideration of this request. As always, please feel free to contact me at (530) 949-4318 if you have any questions.

Sincerely,

[Non-PSD]

Patrick K. Holley, REA Compliance Manager, Covanta Energy, Three Mountain Power, LLC.

Attachments

Cc:

Michael Kussow, Shasta County AQMD